

MICROH

PROFESSIONAL PRODUCTS

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LED MAX ZOOM QUAD

USER MANUAL



1. INTRODUCTION AND UNPACKING

Thank you for purchasing the MICROH LED MAX ZOOM QUAD wash fixture. For your own safety and knowledge, please read this manual before installing or operating the device. This manual covers the important information on installation and applications. Please install and operate the fixture according to instructions. Meanwhile, please keep this manual for future reference.

The MICROH LED MAX ZOOM QUAD wash fixture is made of a new type of high temperature cast aluminum casing. The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. This fixture is applicable but not limited to large-scale live performances, theater, studio, nightclubs and discos.

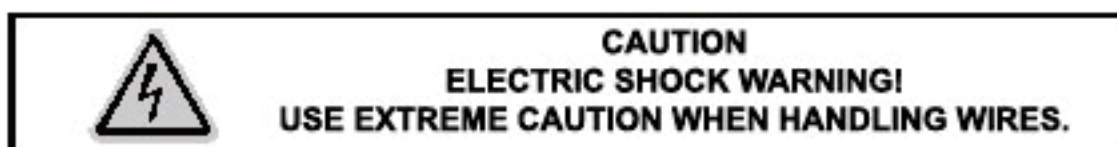
The MICROH LED MAX ZOOM QUAD wash fixture uses 24 powerful 5W QUAD (4in1) LED's which feature high brightness and stability. Please carefully unpack it when you receive the fixture and check if it was damaged during the transportation. And please check whether the following items are included inside the box:

Fixture – One

Gel Frame – One

User Manual - One

2. SAFETY INSTRUCTIONS



This device has left the factory in perfect condition. In order to maintain this condition and to ensure safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.



Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to temperature changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature, and is dry.

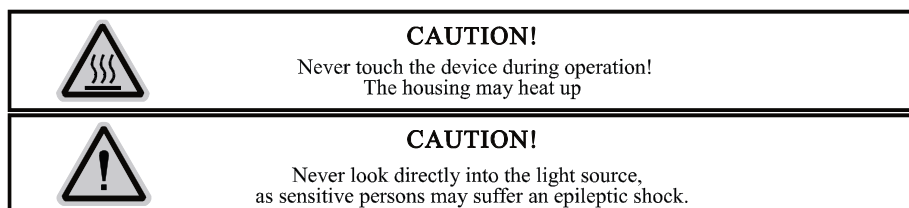
This device falls under protection-class I, therefore it is essential that the device be grounded. The electrical connection must be carried out by a qualified technician.

The device should only be used with rated voltage and frequency. Make sure that the available voltage is not higher than 120V as stated at the end of this manual.

Make sure the power cord is never crimped or damaged in any way, as this could cause shock and damage. If your power cord is damaged in any way, please purchase a new cable from your local MICROH dealer. Always disconnect power, when the device is not in use or before cleaning it. Never pull out the plug by tugging the power cord.

During initial start-up, some smoke or smell may arise. This is a normal process, and does not necessarily mean that the device is defective. It should decrease gradually. Please do not project the beam onto combustible substances.

Fixtures cannot be installed on or near combustible substances. Keep more than 50cm distance from wall for proper ventilation and air flow. If your fixture is or has become damaged in any way, it shall be exclusively replaced or repaired by the manufacturer to avoid any hazard.





CAUTION!

The electric connection must only be carried out by a qualified electrician.

3. OPERATION INSTRUCTIONS

- Do not turn on the fixture if it has been through severe temperature differences. Damage may occur to the fixture. Wait until unit is at room temperature to operate.
- The unit should be protected from any tremor or agitation during transport.
- Do not expose the fixture in any excessive heat, moisture or any environment with too much dust when installing. Do not lay any power cables on the floor. It may cause electronic shock or damage to persons or equipment.
- Make sure to attach the safety chain and ensure the screws are properly screwed in when installing the fixture.
- Make sure the lens is in good condition. It is recommended to replace the unit if there are any damages or severe scratches.
- Make sure the fixture is operated and installed by qualified personnel.
- Keep the original packaging in case of defective product.
- Any non-manufacturer additions, modifications or changes in any way will void all warranty.
- Please do not attempt to open unit. It is only to be serviced by an authorized technician. If this occurs, or is apparent, the warranty will be voided.
- The fixture's warranty will be voided if there are any malfunctions from not following the user manual or any illegal operation (shock short circuit, electronic shock, lamp broke, etc.)

Manual Dimmer Colour Mode

1. Press MODE button and select red dimmer colour (XXX). Continue pressing SET UP to choose different colour. Green G(XXX), Blue b(XXX) or White u(XXX). Continue pressing SET UP to select strobe mode FS (XX) or the zoom mode Z(XXX).
2. Press UP or DOWN to adjust the intensity of the red, green, blue or white colour. 0-255 is the speed of the strobe in the strobe mode and is also the beam angle from big to small in the zoom mode.

0-Off Strobe 1-Lowest Speed 15-Highest Speed

Static Colour Select Mode

1. Press MODE button and select CL (XX) for the static colour. Continue pressing SET UP to select strobe mode St (XX) and the zoom mode Z(XXX).
2. Press UP or DOWN to select static colour 0-15, the strobe speed in the strobe mode and the beam angle from big too small.

0-Off Strobe 1-Lowest Speed 15-Highest Speed

Auto-Run Program

Two Auto-Run programs are built into the LED Max Zoom Quad – Colour Snap program (AJ-X), Colour Mixing (AF-X).

1. Press MODE button and select AJ-(X). Continue pressing SET UP to choose Colour Mixing AF-(X), and continue pressing SET UP to reach the SP (XX) Auto-run Speed Set Mode and the zoom Mode :2(XXX).
2. Press UP or DOWN to select the built-in AJ-(X) Colour Snap program 1-8 ,the built-in AF-(X) Colour Mixing Modes 1-8,the Colour change program Modes & Colour Mixing Modes speed SP(XX) 1-16 and the beam angle from big too small.

1-Lowest Speed 16-Highest Speed

Sound-Active Mode

1. Press MODE button and select SO-(X). Press UP or DOWN to select the Sound-Active Mode 1-8.
2. Continue pressing SET UP button and select SJ-(X). Press UP or DOWN to select the Audio Sensitivity 1-8.

1-Off Sound-Active 2-Lowest Sensitivity 8-Highest Sensitivity

3. Continue pressing SET UP button and select 2(XXX). Press UP or DOWN to adjust beam angle from big too small.

0-the biggest beam angle 190-the smallest beam angle

Setup Mode

4 styles are built into the LED Max Zoom Quad–Display on/off mode, Display normal/inversion mode, Initialization mode, reset mode.

1. Display on/off mode: Press MODE button and select "don". Press UP or DOWN to select display always on "don" or the display off "doFF"
2. Display normal/inversion mode: Continue pressing SET UP button and select "Std". Press UP or DOWN button to select display normal "Std" or display inversion "evr".
3. Initialization mode: Continue pressing SET UP button and select "dEFA". Press UP and DOWN at the same time, you can initialize it at extra factory setting, running on the the first colour change program mode, "AJ-1
4. Reset mode: Continue pressing SET UP button and select "rEst". Press UP and DOWN at the same time, the fixture will reset automatically.

DMX Mode

You can control the fixtures individually via DMX controller. LED Max Zoom Quad is in slave mode in any situation of DMX mode when it is combined to other LED Max Zoom Quad, but not with a DMX-controller.

Addressing: The DMX control board allows you to assign the DMX address which is defined as the first channel from which the LED Max Zoom Quad will respond to from the controller.

1. Press MODE button and select A.XXX
2. Press UP or DOWN to set the DMX address.

You can set 508 pcs.at most when the LED Max Zoom Quad is in 5 channel DMX mode, 507 pcs. at most when it is in 6 channel DMX mode, 506 pcs at most when it is in 7 channel DMX mode, 505 pcs at most when it is in 8 channel DMX mode. The LED display will flicker when there is no controller signal.

Zoom direction

1. Press MODE button and select A.XXX, then press SET UP button and select ":21.UP".
2. Press UP or DOWN to select zoom direction up ":21.UP" or zoom direction down "Z2.dn". "Z2.UP" means that the bigger DMX value, the bigger beam angle; ":21.dn" means that the bigger DMX value, the smaller beam angle.

DMX-Protocol: The LED Max Zoom Quad can be controlled using 5, 6, 7 or 8 channels.

5 Channel Mode controls Red, Green, Blue, White and Zoom.

6 Channel Mode controls Red, Green, Blue, White, Master Dimmer and Zoom.

7 Channel Mode controls Red, Green, Blue, White, Master Dimmer, Strobe and Zoom.

8 Channel Mode controls Red, Green, Blue, White, Master Dimmer, Strobe macro (auto-effects) and Zoom.

1. Press MODE button and select CH0(X)
2. Press UP or DOWN to set the number of desired DMX channels (5,6,7,8)

4. MOUNTING AND INSTALLATION

Caution: For added protection, mount the fixtures in areas outside walking paths, seating areas, or in areas where the fixture might be reached by unauthorized personnel. Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight. Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable. Never stand directly below the device when mounting, removing, or servicing the fixture.

Whether installing inverted on a truss or ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5 ft) away from any flammable materials (decoration etc.). Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

Mounting Points: Overhead mounting requires extensive experience, including calculating working load limits. A knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture are all imperative and should only be performed by a qualified technician. Improper installation can result in bodily injury and damage.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet.

Floor Mounting: Set the 2 brackets at your desired angle and aim your fixture accordingly. Please see diagram below.



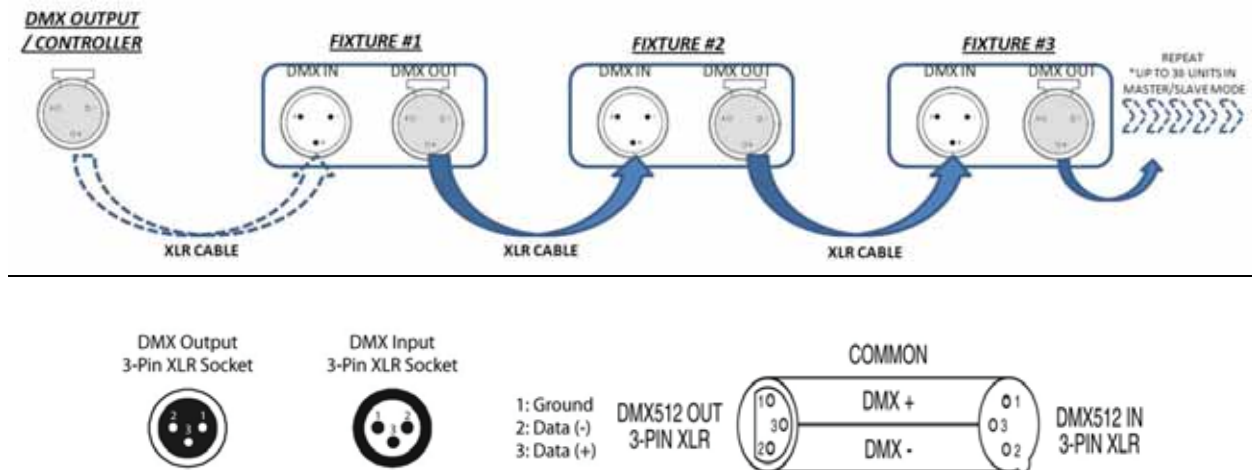
Clamp Mounting: The MICROH LED MAX ZOOM QUAD provides a unique mounting bracket assembly that integrates 2 brackets to be used to mount on a truss or the floor. When mounting this fixture to truss, be sure to secure an appropriately rated clamp to the included bracket fitted through the center hole. As an added safety measure, be sure to attach at least one properly rated safety cable to the fixture.



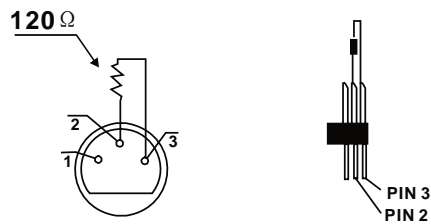
Regardless of the rigging option you choose for your MICROH LED MAX ZOOM QUAD wash fixture, always be sure to secure your fixture with a safety cable. The fixture provides a built-in rigging point for a safety cable on the hanging bracket as illustrated above. Be sure to only use the designated rigging point for the safety cable and never secure a safety cable to a carrying handle.

5. DMX-512 CONTROL CONNECTIONS

This fixture complies with international USITT DMX standards and can be used with either a 3 pin or 5 pin DMX connector. Plug in the provided 3 pin XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the LED MAX ZOOM QUAD. To connect the units to DMX, you must daisy chain the fixtures together as referred in the diagram below. Always end your DMX-512 connection with a DMX terminator.



For installations where the DMX cable has to run a long distance, or is in an electrically noisy environment, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.



6. SETUP MENU

MODE manual	SET UP manual	UP/DOWN manual	instruction
DMX MODE	Address	ADD 1-AS 12	Sets the DMX starting address
	Channels	CH05	The unit occupies 5 DMX channels
		CH06	The unit occupies 6 DMX channels
		CH07	The unit occupies 7 DMX channels
		CH08	The unit occupies 8 DMX channels
	Zoom direction	2dUP	Zoom direction up: the bigger DMX value, the bigger beam angle
		2ddn	Zoom direction down: the bigger DMX value, the smaller beam angle
DIMMER MODE	Red dimmer	R000~R255	Adjust the intensity of the red color
	Green dimmer	G000~G255	Adjust the intensity of the green color
	Blue dimmer	B000~B255	Adjust the intensity of the blue color
	White dimmer	W000~W255	Adjust the intensity of the white color
	Strobe	F500~F5.15	Adjust the strobe speed, F500 is flash off, F50.1 is slowest, F5.15 is fastest
	Zoom	2000~2.190	Adjust the beam angle from big to small
SOUND MODE	Sound Mode select	So-1~So-8	Select the built-in sound mode
	Sensitivity select	SJ-1~SJ-8	Adjust the sensitivity of the sound-active, SJ-1 is the lowest level, SJ-8 is the highest level
	Zoom	2000~2.190	Adjust the beam angle from big to small
AUTO RUN MODE	Dreaming mode set	AF-1~AF-8	Select the built-in dreaming mode
		AJ-1~AJ-8	Select the built-in jumping mode
	Speed set	SP01~SP.16	Adjust the speed of the dreaming/snap program mode
	Zoom	2000~2.190	Adjust the beam angle from big to small
STATIC COLOR SELECT MODE	Static Color select	CL00~CL15	Select the 15 static colors
	Strobe	F500~F5.15	Adjust the strobe speed, F500 is flash off, F50.1 is slowest, F5.15 is fastest
	Zoom	2000~	Adjust the beam angle from big to small

		2.190	
SETUP MODE	Display on/off	don	LED digital tube display always on
		doFF	LED digital tube display off
	Display normal/inversed	5tnd	LED digital tube display normal
		732	LED digital tube display inversed
	Initialization mode	deFA	Initialize the unit at the extra factory setting
	Reset mode	reSEt	Reset the position of the electric machine

7. DMX CHANNEL MODES

5 Channel Mode Configuration

CH No.	DMX value	Function
CH1	000~255	Red(dim→bright)
CH2	000~255	Green(dim→bright)
CH3	000~255	Blue(dim→bright)
CH4	000~255	White(dim→bright)
CH5	000~255	Zoom, adjust the beam angle from the smallest to biggest when it is set to 2dUP
		Zoom, adjust the beam angle from the biggest to smallest when it is set to 2ddn

6 Channel Mode Configuration

CH No.	DMX value	Function
CH1	000~255	Dimming(dim→bright)
CH2	000~255	Red(dim→bright)
CH3	000~255	Green(dim→bright)
CH4	000~255	Blue(dim→bright)
CH5	000~255	White(dim→bright)
CH6	000~255	Zoom, adjust the beam angle from the smallest to biggest when it is set to 2dUP
		Zoom, adjust the beam angle from the biggest to smallest when it is set to 2ddn

7 Channel Mode Configuration

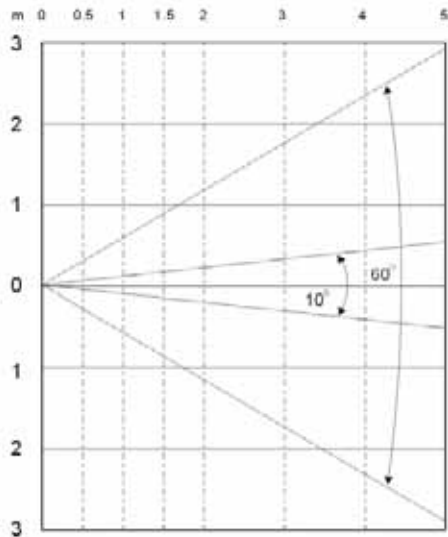
CH No.	DMX value	Function
CH1	000~255	Dimming(dim→bright)
CH2	000~255	Red(dim→bright)
CH3	000~255	Green(dim→bright)
CH4	000~255	Blue(dim→bright)
CH5	000~255	White(dim→bright)
CH6	000~015	No function
	016~255	Strobe slowest to fastest flash frequency is 0.1HZ-20HZ

CH7	000~255	Zoom, adjust the beam angle from the smallest to biggest when it is set to 2dUP
		Zoom, adjust the beam angle from the biggest to smallest when it is set to 2dDn

8 Channel Mode Configuration

CH8	CH7			CH6	CH5	CH4	CH3	CH2	CH1				
	MODE	DMX VALUE	FUNCTION										
<div>Zoom</div> <div>1.adjust the beam angle from the smallest to biggest when it is set to 2dUP</div> <div>2.adjust the beam angle from the biggest to smallest when it is set to 2dDn</div>	1	0-15	No function	Strobe slowest to fastest 16-255 flash frequency is 0.1HZ-20HZ	White 0-255 (dim→bright)	Blue 0-255 (dim→bright)	Green 0-255 (dim→bright)	Red 0-255 (dim→bright)	Dimming 0-255 (dim→bright)				
	2	16-31	Red		No function					No function			
	3	32-47	Green										
	4	48-63	Blue										
	5	64-79	Purple										
	6	80-95	Yellow										
	7	96-111	Cyan										
	8	112-127	White										
	9	128-135	Color mixing 1	Speed 0-255 (slow→quick)								No function	No function
	10	136-143	Color mixing 2										
	11	144-151	Color mixing 3										
	12	152-159	Color mixing 4										
	13	160-167	Color mixing 5										
	14	168-175	Color mixing 6										
	15	176-183	Color mixing 7										
	16	184-191	Color mixing 8										
	17	192-199	Color change 1	Sensitivity 0-255									
	18	200-207	Color change 2										
	19	208-215	Color change 3										
	20	216-223	Color change 4										
	21	224-231	Color change 5										
	22	232-239	Color change 6										
	23	240-247	Sound mode1										
	24	248-255	Sound mode2										

8. PHOTOMETRIC DATA



YHLL-001TZ LED MAX ZOOM QUAD

	0.5m	1m	2m	3m	4m	5m	
10°	0.3	0.6	1.2	1.8	2.4	3	Diameter (Meters)
R	7800	3170	837	408	210	155	LUX
G	7850	2600	685	324	162	112.8	LUX
B	6880	3550	980	392	223	157	LUX
W	10020	4000	1320	582	335	203	LUX
RGBW	30200	11540	3300	1480	870	540	LUX
60°	0.675	1.35	2.7	4.05	5.4	6.75	Diameter (Meters)
R	3080	780	193	78	44.3	29	LUX
G	3080	739	183	78.6	43.3	21.6	LUX
B	4030	951	248	100	55.6	36.5	LUX
W	4480	1177	299	127	67.4	43	LUX
RGBW	12770	3310	825	367	254	127.2	LUX

9. KEY FEATURES

- 24 x 5W Quad LEDs
- 6 Operation Modes
- 3 Pin XLR Input & Output
- Zoom Lens (10° to 60° beam angle)
- DMX Control
- Double Bracket for Truss and Floor Mounting
- Gel Frame Included
- Built-in microphone
- 4-Button LED Digital Display (MODE, SETUP, UP, DOWN)

10. TECHNICAL SPECIFICATIONS

MODEL: LED MAX ZOOM QUAD

LAMP: 24 x 5W Quad LEDs

OPERATING TEMPERATURE: -25°C to 45°C

VOLTAGE: 120VAC 60Hz 125W

FUSE: 3A

DIMENSIONS: 11.8" x 10.6" x 8.7" / 300 x 269 x 221 mm

PACKING DIMENSIONS: 16"x14"x11" / 400 x 350 x 280 mm
NET WEIGHT: 14.8 lbs / 6.71 kg
GROSS WEIGHT: 16 lbs / 7.3 kg
WARRANTY: 2 Year Limited Warranty

11. MAINTENANCE AND CLEANING

The following points have to be considered during the inspection:

- 1) All screws for installing the device or parts of the device must be tightly connected, and must not be corroded.
- 2) There must not be any deformations on the housing, colour lenses, fixations or installation spots (ceiling, suspension, trussing).
- 3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
- 4) The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage must be handled by a skilled installer or technician. Any safety issues must be resolved.



In order to keep the fixture in good condition and extend the life, we suggest regular cleaning to the fixture.

- 1) Clean the inside and outside lens each week to avoid the light output from darkening due to accumulation of dust, dirt, etc.
- 2) Clean the fan each week.
- 3) A detailed electrical check by approved technician every three months is advised. Ensure the circuit contacts are in good condition, and prevent from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.

There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".

Should you need any spare parts, please order genuine MICROH parts from your local dealer.

IF YOU SHOULD EXPERIENCE ANY PROBLEMS OR ISSUES PLEASE CONTACT MICROH PROFESSIONAL PRODUCTS BY EMAIL AT info@microhpro.com

In the event that your unit is defective in any way, please contact your local dealer to obtain an RA number for service repair.

DISCLAIMER – MICROH believes that the information contained within this user manual is accurate. However, Microh is not responsible for any error or addendums to this manual. If you have any comments or general suggestions on how this manual can be improved please contact info@microhpro.com. Thank you.